## HIBERNATION OF URANOTAENIA SAPPHIRINA (OSTEN SACKEN) (DIPTERA: CULICIDAE).

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Uranotaenia sapphirina (O. S.), the sapphire-lined mosquito, is rarely taken, despite its wide distribution throughout the Antilles, Central America and North America. The females are not troublesome, but according to Dyar (1928) will bite under favorable conditions. The habits of the males are unknown. Larvae prefer pools of a permanent or semi-permanent nature, containing *Spirogyra* or *Lemna*, such as are inhabited by *Anopheles* larvae, which the larvae of *U. sapphirina* closely resemble at first glance. Breeding seems to be continuous throughout the summer.

In 1904 Professor John B. Smith suggested that *U. sapphirina* hibernates in the adult stage, since the partially submerged egg rafts are not well adapted to overwintering, since the larvae had never been collected during the winter months and since the larval habit of resting and feeding just under the surface would not be suited to hibernation in that stage. There appears, however, to be no published confirmation of this suggestion.

On February 3, 1934, while making observations on the hibernation of mosquito species in connection with the Federal Civil Works Pest Mosquito Control Work Relief Program, carried on by the U. S. Bureau of Entomology in collaboration with the New York State Museum, the writer, accompanied by R. S. Coburn and Paul E. Hering, collected an adult female, *U. sapphirina*, hibernating on the ceiling of a small cave near South Bethlehem, Albany County, New York. Subsequently on February 24, 1934, another adult female was captured in the same cave. Two more females were taken on March 3, 1934.

On the same dates, *Culex pipiens* Linn. and *Anopheles punctipennis* (Say), the only other mosquitoes hibernating in the cave, were collected in abundance.

Dyar, H. G. 1901. The Life History of Uranotaenia sapphirina. O. S. Journ. N. Y. Ent. Soc. 9: 179–182.

- Dyar, H. G. 1928. The Mosquitoes of the Americas. Carnegie Institution of Washington, Pub. No. 387:421.
- Smith, John B. 1904. New Jersey Agr. Exp. Sta. Rept. on Mosquitoes, p. 338.